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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/092,149      | 03/06/2002  | James Triba          | 2001-503            | 8972             |

7590 10/31/2003

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EXAMINER

STAHL, MICHAEL J

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|          | 2874         |

DATE MAILED: 10/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                  |
|------------------------------|------------------------|------------------|
| <b>Office Action Summary</b> | Application No.        | Applicant(s)     |
|                              | 10/092,149             | TRIBA, JAMES     |
|                              | Examiner<br>Mike Stahl | Art Unit<br>2874 |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-8 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_ is/are allowed.  
 6) Claim(s) 1-8 is/are rejected.  
 7) Claim(s) \_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 06 March 2002 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 11) The proposed drawing correction filed on \_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.  
 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.  
 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a)  The translation of the foreign language provisional application has been received.  
 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)      4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)      5) Notice of Informal Patent Application (PTO-152)  
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.      6) Other: \_\_\_\_\_

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 3, 6, and 7 are rejected under 35 U.S.C. 102(a) as being anticipated by prior art admitted by applicant.

As to claim 1, the process illustrated in figs. E1 and E2 of the present application (representing background art) includes the steps of fabricating a fused billet of optical fibers, reducing the diameter to form a shoulder **SR**, providing a first billet-surrounding member (frit ring) to slide over the billet and abut the shoulder, providing a second billet-surrounding member (metal flange) to slide over the billet and fit over the first billet-surrounding member, sliding the first and second members in that order over the billet to contact the shoulder, urging the members toward the shoulder, and heating the assembly to a temperature sufficient to fuse the first member to the billet and the second member.

As to claim 3, the first billet-surrounding member (a frit ring) includes frit.

As to claim 6, the recited method steps are also anticipated by the process of figs. E1 and E2 since claim 6 recites first, second, and third materials but does not recite what they are or how they are related. The process also anticipates claim 7 by way of condition (ii) since both the cladding and the first ring are made of glass.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over prior art admitted by applicant.

As to claim 2, figs. E1 and E2 do not show any grinding or polishing steps. However, it is well known in the art to polish the ends of optical fiber bundles. It would have been obvious to a person having ordinary skill in the art to finish the fused component after the fusing step by polishing its endface in order to obtain an optically smooth surface.

As to claim 4, figs. E1 and E2 do not specify the type of glass frit used in the frit ring. It is well known in the art that devitrifying frits generally form stronger bonds than vitrifying frits, and accordingly it would have been obvious to a skilled worker to form the frit ring of the prior art process of fig. E2 from devitrifying frit.

As to claim 5, the admitted prior art process uses a metal flange ring. However, it would have been obvious to a person of ordinary skill in the art to alternatively use a glass flange ring since it is well known that glasses are more compatible with each other, for example in terms of thermal expansion coefficient, than with metals. Using a glass flange ring would advantageously reduce the stress on the components associated with thermal expansion coefficient mismatch.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gregory (US 5550945).

As to claim 8, the process set forth in claim 18 of Gregory meets the requirements of claim 8 except that it does not include a grinding step. It is old in the art to finish fused fiber bundle assemblies by grinding. It would have been obvious to a person of ordinary skill in the art to add a grinding step to the process taught by Gregory in order to obtain a smooth surface or an anti-reflecting angled surface on the end of the fused fiber bundle.

#### *Conclusion*

JP 59-214805 is considered relevant to the present disclosure and is cited on the attached PTO-892 form.

Any inquiry concerning this communication should be directed to Mike Stahl at (703) 305-1520. Official communications eligible for submission by facsimile may be faxed to (703) 872-9318 (before final) or (703) 872-9319 (after final). Inquiries of a general or clerical nature (e.g., a request for a missing form or paper, etc.) should be directed to the Technology Center 2800 receptionist at (703) 308-0956 or to the technical support staff supervisor at (703) 308-3072.

MJS

Michael J. Stahl  
Patent Examiner  
Art Unit 2874



HEMANG SANCHAVI  
PATENT EXAMINER

September 28, 2003